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(54) Title: COMBINATION FLOW THROUGH INJECTION AND ISOLATION VALVE FOR HIGH PRESSURE FLUIDS

(57) Abstract: A flow through injection valve having a stationary member, a movable member, a surface of the stationary member interfacing with a surface of the movable member; and at least one pin isolation valve having a flow through internal conduit and movably positioned so that the internal conduit can interface with at least one flow through conduit in the movable member. The pin isolation valves are movably positioned so that the internal conduit is also capable of fluidically communicating with another flow through internal conduit in the movable member. The flow through injection valve can be combined with a similar flow through isolation valve to serve as a multiple valve and typically for replacing a conventional face seal valve of a high pressure liquid chromatography (HPLC) system. The multiple valve allows flow to be transferred through without need for switching or rotating under high pressure. Movement is by rotation or translation.

